

CLAIMS

What is claimed is:

1. A medical filter for therapeutic treatment of a patient, comprising:
  - a first and second end defining a longitudinal axis;
  - more than one pair of ribs extending between the first and second ends, the ribs tending to resiliently expand in radially outward directions from a compressed initial shape to an expanded deployed shape;
  - wherein in the compressed initial shape, the ribs each follow a path substantially parallel to the longitudinal axis;
  - wherein in the expanded deployed shape, the ribs each follow an undulating path, such that a first portion of each pair of ribs extends substantially adjacent to each other for a distance from the first end, and a second portion of each pair of ribs extends substantially adjacent to each other for a distance from the second end; and an intermediate portion of each one of a pair of ribs tends to curve away from each other in the expanded deployed shape;
  - wherein in the expanded deployed shape, the filter defines a first and second filtering portion near the first and second end, respectively.
2. The filter of Claim 1, wherein in the expanded shape, the intermediate portion of each one of a pair of ribs tends to curve away from each other and touch one of another pair of ribs.
3. The filter of Claim 1, wherein in the expanded shape, a central portion of each rib tends to extend parallel to the longitudinal axis.

4. The filter of Claim 1, wherein the filter has at least three pairs of ribs.
5. The filter of Claim 1, wherein the filter has six pairs of ribs.
6. The filter of Claim 1, wherein the filter is made of nitinol.
7. A method of making a medical filter for therapeutic treatment of a patient, comprising the steps of:
  - a) providing a tubular form defining a longitudinal axis and having a first and second end;
  - b) cutting more than one pair of struts in the tubular form, so as to define the struts extending between a first and second end of the filter; and
  - c) treating the struts so that they tend to resiliently expand from a compressed shape to an expanded shape:

by expanding a central portion of the struts in radially outward directions; such that a gap is defined between the pairs of struts, and the individual struts of each pair follow a path which is substantially adjacent to the other strut of that pair; and by bending a central portion of each of the ribs to follow an undulating path in the expanded shape, such that in the expanded shape a first portion of each pair of ribs extends substantially adjacent to each other for a distance from the first end, and a second portion of each pair of ribs extends substantially adjacent to each other for a distance from the second end; wherein an intermediate portion of each one of a pair of ribs is bent to curve away from each other in the expanded shape;

wherein in the expanded deployed shape, the filter defines a first and second filtering portion near the first and second end, respectively.